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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/826,040 04/05/2001		Philippe Pantigny	034299-327	3786	
7590 03/02/2004			EXAMINER		
Robert E. Krebs			NGUYEN, TU T		
Thelen Reid & I	PRiest LLP				
P.O. Box 64064	0	ART UNIT	PAPER NUMBER		
San Jose, CA	95164-0640	2877	2877		

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

					/ / / /			
		Applicati	on No.	Applicant(s)	<del>!   }</del>			
Office Action Summary		09/826,0	40	PANTIGNY ET AL.				
		Examine	r	Art Unit				
		Tu T. Ngu	•	2877				
The Period for Rep	MAILING DATE of this commun	nication appears on th	e cover sheet with the	correspondence add	ress			
THE MAILI - Extensions o after SIX (6) - If the period i - If NO period - Failure to rep Any reply rec	NED STATUTORY PERIOD F NG DATE OF THIS COMMUN f time may be available under the provisions MONTHS from the mailing date of this comr or reply specified above is less than thirty (3 for reply is specified above, the maximum st ly within the set or extended period for reply eived by the Office later than three months t term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no evenunication. 30) days, a reply within the state that the	vent, however, may a reply be to stutory minimum of thirty (30) da vill expire SIX (6) MONTHS fror plication to become ABANDON	imely filed  ys will be considered timely.  the mailing date of this com  ED (35 U.S.C. § 133).	nmunication.			
Status								
1)☐ Resp	onsive to communication(s) file	ed on						
2a)☐ This	action is FINAL.	2b)⊠ This action is r	non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the m								
close	d in accordance with the pract	ice under <i>Ex parte Qu</i>	uayle, 1935 C.D. 11, 4	153 O.G. 213.				
Disposition of	Claims							
4)⊠ Clain	4) Claim(s) <u>1-9</u> is/are pending in the application.							
4a) O	f the above claim(s) is/a	are withdrawn from co	onsideration.					
·	Claim(s) is/are allowed.							
•	Claim(s) <u>1-9</u> is/are rejected.							
•								
8)∐ Clain	n(s) are subject to restri	ction and/or election i	requirement.					
Application Pa	apers							
•	pecification is objected to by th		_					
•	rawing(s) filed on <u>05 April 200</u>							
• •	cant may not request that any obje		*					
	cement drawing sheet(s) including							
11)∐ Ine d	ath or declaration is objected t	o by the Examiner. N	ote the attached Offic	e Action of form PTC	J-13Z.			
Priority under	35 U.S.C. § 119							
a)⊠ All 1.⊠ 2.⊟	bwledgment is made of a claim b) Some * c) None of: Certified copies of the priority Certified copies of the priority Copies of the certified copies application from the Internation	documents have been documents have been of the priority documents.	en received. en received in Applica ents have been receiv	tion No	stage			
* See th	e attached detailed Office action	on for a list of the cert	tified copies not receiv	red.				
Attachment(=)	,							
Attachment(s)  1) Notice of Re	eferences Cited (PTO-892)		4) Interview Summar	v (PTO-413)				
2) ☐ Notice of Dr 3) ☑ Information	aftsperson's Patent Drawing Review (I Disclosure Statement(s) (PTO-1449 or /Mail Date		Paper No(s)/Mail [	Patent Application (PTO-	152)			

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## **DETAILED ACTION**

#### **Drawings**

Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

For this application, the abstract is more than 150 words and the same as claim

<u>1.</u>

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5,7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pantigny et al (5,742,058).

With respect to claim 1, Pantigny discloses a matrix readout system. The system comprises: a matrix of detectors DET(i,j) (fig 4a) connected through at least a bus BCj (fig 4a) and converted into a voltage (fig 4b); an impedance matching device (column 4, lines 40-45) and a method for determining the variation of charge (column 6, lines 1-30).

Pantigny discloses a method for determining the variation of charge (column 6, lines 1-30). However, Pantigny does not disclose the method for determining the variation of charge as claimed in claim 1. However, it would have been obvious a design choice to modify Pantigny with different method of determining the variation of charge for different system setups or different environments.

With respect to claim 2, Pantigny discloses a low out put capacitor CPEL (fig 1a).

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With respect to claims 3,7, it would have been obvious a design choice to connect the impedance matching device as close as possible to the input of the integrator to reduce the system noise.

With respect to claims 4-5,8-9, Pantigny does not disclose a common-gate TMOS transistor or a feedback amplifier. However, the claimed elements would have been known. It would have been obvious to modify Pantigny's system with the known elements to reduce the system cost.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pantigny et al (5,742,058) in view of Yoshio (Patent Abstract of Japan, EP 62292081).

With respect to claim 6, Pantigny does not disclose a current mirror. Yoshio disclose an image sensor with a current mirror circuit 24. it would have been obvious to modify Pantigny with the current mirror circuit of Yoshio to make the system more efficiency.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T. Nguyen whose telephone number is (571) 272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tu T. Nguyen Primary Examiner Art Unit 2877

Junguyen

02/19/2004